

WE CLAIMS:

1. A radio communication apparatus comprising:
 an antenna for transmitting and receiving a
 signal to/from a terminal;
 a demodulator for demodulating the signal
 received by the antenna;
 a terminal identification equipment for
 identifying information inherent to the terminal
 according to the signal demodulated; and
 a priority control equipment for receiving a
 condition requested by a user of the terminal according
 to the information identified by the terminal
 identification equipment;
 wherein the signal transmitted via the
 antenna to the terminal is based on condition received
 by the priority control equipment.
2. The radio communication apparatus according
 to claim 1, wherein said radio communication apparatus
 decides a density of power received by the terminal
 according to a communication state of the terminal
 reported from the terminal, allocates a signal to a
 time-divided packet slot, and transmits the signal to
 the terminal.
3. The radio communication apparatus according
 to claim 2, wherein
 the antenna controls radio wave interference;
 the condition is a condition related to the
 density of power received by the terminal; and

10076567 021902
20070220 2009001

said radio communication apparatus further comprises a transmission power control equipment for controlling power transmitted from said radio communication apparatus.

4. The radio communication apparatus according to claim 3, further comprising:

a signal transmission rate decision equipment for changing a transmission rate of the signal transmitted to the terminal under said communication condition.

5. The radio communication apparatus according to claim 4, wherein

said information inherent to the terminal is a device number of the terminal; and

said condition is decided corresponding to the device number.

6. The radio communication apparatus according to claim 5, wherein

said communication state is related to the carrier-to-interference power ratio (C/I).

7. The radio communication apparatus according to claim 6, wherein said radio communication apparatus is a radio communication apparatus utilized for connection with a high-data-rate mobile telephone.

8. A radio communication apparatus comprising:
reception means for receiving a signal from a terminal;

demodulation means for demodulating the

10076567.021902

signal received by the reception means;

identification means for identifying information inherent to the terminal according to the demodulated signal;

condition fetch means for receiving a condition requested by a user of the terminal according to the information identified by the identification means; and

signal transmission means for transmitting a signal to the terminal according to the condition fetched by the condition fetch means.

9. The radio communication apparatus according to claim 8, wherein said radio communication apparatus decides intensity of power of a signal transmitted to the terminal and allocates the signal to a time-divided packet, thereby transmitting the signal to the terminal.

10. The radio communication apparatus according to claim 9, wherein

said condition is a condition related to power intensity of the signal transmitted to the terminal, and

said signal transmission means transmits the signal to the terminal with the intensity based on said condition.

11. The radio communication apparatus according to claim 10, further comprising signal transmission rate change means for changing the transmission rate of

2007567 021902

the signal transmitted to the terminal according to said communication state.

12. The radio communication apparatus according to claim 11, wherein

said information inherent to the terminal is a device number of the terminal; and

said condition is decided according to the device number.

13. The radio communication apparatus according to claim 12, wherein said communication state is related to C/I (carrier-to-interference power ratio).

14. The radio communication apparatus according to claim 13, wherein said radio communication apparatus is a radio communication apparatus used for connection with a high-data-rate mobile telephone.

15. A signal transmission/reception method applied to a radio communication apparatus, the method comprising steps of:

receiving a signal transmitted from a terminal;

identifying a content of the signal received;

in case the content is related to location of the terminal, notifying a location of the terminal to an upper-node station;

in case the content is related to connection from the terminal, querying the upper-node station about a condition requested by a user of the terminal; and

10076567.021902

transmitting a signal to the terminal according to the said condition requested.

16. The signal transmission/reception method according to Fig. 15, further comprising steps of:

receiving report about communication state of the terminal from the terminal; and

deciding power intensity of a signal transmitted to the terminal, according to the communication state of the terminal.

17. The signal transmission/reception method according to claim 16, wherein said condition is a condition related to a power intensity of the signal transmitted to the terminal; and

the step of transmitting the signal further includes a step of:

using power of an intensity based on the condition, allocating the signal to a time-divided packet slot and transmitting the signal to the terminal.

18. The signal transmission/reception method according to claim 17, further comprising a step of: changing a transmission rate of the signal transmitted to the terminal, according to a communication state of the terminal.

19. The signal transmission/reception method, wherein the step of querying by which a reception of the condition queried is enabled includes the steps of:

receiving inherent information inherent to

the terminal; and

transmitting the inherent information to an upper-node station.

20. The signal transmission/reception method according to claim 19, wherein

said inherent information is a device number of the terminal;

said condition is decided corresponding to the device number; and

said communication state is related to C/I (carrier-to-interference power ratio);

the method further comprising a step of:

in case said content is a request for change of said condition requested by the user of the terminal, requesting the upper-node station to set a changed condition requested by the user of the terminal.

10076567.021902